WHAT IS CLAIMED IS:

1. A scintillator panel comprising a radiation-transparent substrate, a flat resin film formed on said substrate, a reflecting film formed on said flat resin film, and a scintillator formed on said reflecting film.

2. A scintillator panel according to claim 1, wherein at least a part of said scintillator is covered with a transparent organic film.

3. A scintillator panel according to claim 2, wherein said transparent organic film covers over the all surfaces of said scintillator.

4. A scintillator panel according to claim 3, wherein said transparent organic film reaches to the surfaces of said substrate.

5. A radiation image sensor comprising a radiation-transparent substrate, a flat resin film formed on said substrate, a reflecting film formed on said flat resin film, a scintillator formed on said reflecting film, and an imaging device disposed so as to face said scintillator.

6. A radiation image sensor according to claim 5, wherein at least a part of said scintillator is covered with a transparent organic film.

7. A radiation image sensor according to claim 6, wherein said transparent organic film covers over the all

surfaces of said scintillator.

8. A radiation image sensor according to claim 7, wherein said transparent organic film reaches to the surfaces of said substrate.

9. A method of making a scintillator panel comprising steps of:

forming a flat resin film on a radiation-transparent substrate;

forming a reflecting film on said flat resin film; and

forming a scintillator on said reflecting film.

10. A method of making a scintillator panel according to claim 9, further comprising a step of covering at least a part of said scintillator with a transparent organic film.

11. A method of making a scintillator panel according to claim 10, wherein said transparent organic film covers the all surfaces of said scintillator.

12. A method of making a scintillator panel according to claim 11, wherein said transparent film reaches to the surfaces of said substrate.

13. A method of making a radiation image sensor comprising steps of:

forming a flat resin film on a radiation-transparent substrate;

forming a reflecting film on said flat resin film;

forming a scintillator on said reflecting film; and

disposing an imaging device opposite said scintillator.

14. A method of making a radiation image sensor according to claim 13, further comprising a step of covering at least a part of said scintillator with a transparent organic film.

15. A method of making a radiation image sensor according to claim 14, wherein said transparent organic film is covering the all surfaces of said scintillator.

16. A method of making a radiation image sensor according to claim 15, wherein said transparent film reaches to the surfaces of said substrate.